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EXAMINER

WERNER, BRIAN P

ART UNIT	PAPER NUMBER
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2621

DATE MAILED: 11/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/654,939

Applicant(s)

JO ET AL

Examiner

Brian P. Werner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,9-11 and 18-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 1-3 is/are allowed.
6) ☒ Claim(s) 18,19,23 and 24 is/are rejected.
7) ☒ Claim(s) 9-11, 20-22 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's remarks received on November 17, 2004, and claim amendment received on May 23, 2005 have been entered. The claim amendment serves to overcome the previous objections to claims 9-11. The remarks will be addressed in the applicable sections of the Office Action below.

Priority Chain (Reiterated from Previous Actions)

2. The preset application (i.e., 09/654,939) is a divisional reissue application filed on December 22, 2000, claiming priority to reissue application number 09/638,796 filed on August 11, 2000, which is a reissue application of number 08/495,591 filed on November 3, 1995, patent number 5,793,897, which is a 371 of international application number PCT/KR94/00177 filed on December 16, 1994, which claims priority to Korean applications 93-28074 and 94-34497, filed on December 16, 1993 and December 15, 1994 respectively.

Reissue Applications (Repeated from Previous Action)

3. RECAPTURE

Newly added claims 18-23 have been examined with respect to 35 U.S.C. 251, and found to be permissible. In order to clarify the record, a brief explanation shall follow.

I is clear from the prosecution history of the Patent file (i.e., the original prosecution) that a single mutually-agreed-upon action resulted in allowability. That is, following a telephone interview detailed in paper number 10 of the Patent file, the applicant filed amendment C canceling dependent claim 2 of the Patent file and incorporating all of its limitations to independent claim 1. That limitation reads as follows (referred to below as the “added subject matter”):

“, wherein said selecting step has the selecting range of a plurality of variable-length coding tables having different patterns of a regular region and an escape region according to said intra/inter mode information of the currently processed block.”

Following the amendment, the examiner allowed the application claims.

Now turning to the reissue claims, and specifically to reissue independent claims 18, 19 and 23, the applicant has retained a broader version of the added subject matter. For example, independent claim 18 recites selecting from a “plurality of variable-length coding tables”, the tables comprising a table for “an alternating-current (AC) component of an intra mode that is

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different from a table selectable for an inter mode”. Independent claims 19 and 23 recite equivalent subject matter.

This is a broader version of the subject matter added to that Patent claim 1 which resulted in allowance. That is, reissue independent claim 18 recites selecting from a plurality of VLC tables that have “different” patterns for “intra” and “inter” mode information, which is a broader version of the added subject matter of patent claim 1. Thus, a recapture rejection is avoided (MPEP 1412.02).

4. DECLARATION

In accordance with 37 CFR 1.175(b)(1), a supplemental reissue oath/declaration under 37 CFR 1.175(b)(1) must be received before this reissue application can be allowed.

Claims 1-3, 9-11 and 18-23 are rejected as being based upon a defective reissue declaration under 35 U.S.C. 251. See 37 CFR 1.175. The nature of the defect is set forth above.

Receipt of an appropriate supplemental oath/declaration under 37 CFR 1.175(b)(1) will overcome this rejection under 35 U.S.C. 251. An example of acceptable language to be used in the supplemental oath/declaration is as follows:

“Every error in the patent which was corrected in the present reissue application, and is not covered by a prior oath/declaration submitted in this application, arose without any deceptive intention on the part of the applicant.”

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5. RESPONSE TO REMARKS RECEIVED ON NOVEMBER 17, 2004

Summary of Applicant's Remarks: "Applicant's will defer the submission of a supplemental declaration until all pending claims are allowed ..." at page 6, bottom paragraph of the remarks.

Examiner's Response: Applicant's deferral is acknowledged.

Claim Objections

6. Applicant's remarks regarding the previous claim objections at page 7, first paragraph of the November 17, 2004 submission are acknowledged. The previous claim objections to claims 9-11 are withdrawn in view of the applicant's amendment. These claims now properly depend from independent claim 18.

Claims 1-3

7. Claims 1-3 are allowed.

8. The following is an examiner's statement of reasons for allowance: The prior art does not teach "variable-length coding tables ... having different patterns of a regular region and an escape region", as depicted by applicant's figures 7A-7C, and as argued by the applicant in the response received on November 17, 2004, at page 9, bottom paragraph through page 10, first two

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paragraphs. The VLC tables disclosed by Kaneko at figure 10, each represent a single region within the coding block depicted in figure 12. Thus, each of the tables in figure 10 do not have distinct regular and escape regions as required by the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claims 18, 19, 23 and 24

9. Claim Rejections:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18, 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kato (US 5,559,557 A) and Okazaki et al. (US 5,982,437 A).

Regarding independent claims 18, 19 and 23, Kato discloses an adaptive variable length coding method

(e.g., figures 7, 13 and 17 best exemplify the encoding method of Kato; Figure 7 is an overall block diagram, figure 13 is a more detailed block diagram of the overall system, and figure 17 is a detailed diagram of the variable length coding VLC according to block 64 of figure 7, and block 126 of figure 13)

in which quantized orthogonal transform coefficients

(i.e., “quantized DCT coefficients” at column 13, line 3; looking at figure 13, a DCT is performed at block 114, and the coefficients of the DCT are quantized at block 115; these coefficients are represented in figure 17 at numeral 700)

are scanned in a predetermined pattern

(i.e., “scan ... in a zigzag manner” at column 13, line 4), and are then variable length coded (i.e., “variable length code” at column 6, line 10; looking at figure 13, variable length coding takes place at block 126; figure 17 depicts the details of the variable length coding)

in a coding system for image data

(“raw picture” at column 6, line 25),

comprising the steps of:

setting a plurality of variable length coding tables

(in figure 17, more than four tables are set; that is, block 704 has Huffman tables for DC and AC coefficients and block 707 has at least the four tables depicted in figures 9B, 9C, 21A

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and 21B; that is, not only does block 706 rely upon tables of figures 9B-9C, but it may also access the tables of figures 21A and 21B when a different quantization precision is required, as described at column 28, lines 41-56; Thus, a plurality of VLC coding tables are set as follows: block 704 has a table, and block 705 has at least four tables corresponding to figures 9B, 9C, 21A and 21B;

NOTE however that there are other ways the Kato reference anticipates this limitation; for example, table modifier 706 modifies the tables of 707 and thus sets a different set of tables; Kato states that "the ranges of the tables can be dynamically adapted to the encoding precision required" at column 4, line 49; in addition, Kato states that the "code tables ... are modified in accordance with results of statistical observation of input signals" at column 8, line 25; this is stated again by Kato at column 28, lines 41-55);

selecting one of the plurality of variable length coding tables

(e.g., either 9B, 9C, 21A or 21B; e.g., table 9B or 21A is selected by the modifier 706 if flag S702 is set, corresponding to Y data or table 9C or 21B is selected if flags 703 or 704 are set corresponding to Cb or Cr data; this is described at column 22, lines 7-15)

according to intra/inter mode information

(e.g., in figure 17, block 709 sets switch 710 to the "B" position for "intra" mode image information and "A" for inter mode image information; when the switch is in the "A" position, the Huffman tables of block 704 are utilized for coding; when the switch is in the "B" position,

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the coding tables of block 705 are utilized for coding; then, according to the Y or Cb and Cr flags as described above, either table 9B/21A or 9C/21B are selected)

scanning position

(e.g., block 703 [the DC/AC Separator] selects block 704 for AC coefficients and block 705 for DC coefficients; when block 705 is selected corresponding to DC coefficients, then according to the Y or Cb and Cr flags as described above, either table 9B/21A or 9C/21B are selected; given that AC and DC coefficients have different scanning positions [i.e., the dc coefficient is scanned first, followed by the ac coefficients in a zigzag manner], the claim limitation is met),

and quantization step size

(i.e., “modifier 706 functions to control the storage 707, based on the intra_dc_precision code S26; code 26 represents quantization step size; that is, “the signal CTL represents, the required precision of 8, 9, 10 or 11 quantized bits” at column 8, line 60, and “S26 corresponds to the CTL signal” at column 11, line 10; if the precision required is to be 8-11 bits, one of tables 9B or 9C are selected; if the precision is less than that, then one of tables 21A or 21B are supplied; see “the VLC process ... is based on data from the tables shown in FIG. 21A and 21B instead of FIG. 9B and 9C” at column 28, line 50),

where the selecting step has the selecting range of a plurality of variable length coding tables

(as stated above, a plurality of coding tables are available for selection); and

wherein said plurality of variable-length coding tables comprise:

a table selectable for a DC component of said intra mode (figure 17, numeral 705 encodes DC coefficients according to a table stored in 707); and

said table for said DC component (figure 17, numeral 707, which relies upon tables 9A-9C as described at column 21, line 41) comprising variable-length codes (i.e., as depicted in figures 9A) further selectable according to said DC component (each of the codes depicted in figure 9A are selectable according to the size of the DC component) that has been quantized by a quantization step size (as depicted in figure 13, the DC components are encoded at numeral 126 after quantization at numeral 115); and

and variable length coding said quantized orthogonal transform coefficients according to said selected variable length coding table

(figure 17, the coded data is present at numeral 732).

Kato does not teach a table selectable for an AC component of an intra mode (figure 17, numeral 704) that is different from a table selectable for an inter mode.

Kato's intra mode AC coefficients and Inter mode coefficients are encoded by the same encoder, at figure 17, numeral 704. That is, Kato's inter mode coefficients are encoded using the VLC of numeral 704, and Kato's intra mode AC coefficients (i.e., signal S707) are encoded by that same encoder.

Okazaki discloses a system in the same field of variable length coding an image signal, comprising a VLC encoder (figure 5, numeral 23A), and a plurality of VLC tables comprising a table selectable for an AC component of an intra mode (figure 5, numeral 23C and detailed in figure 14) that is different from a table selectable for an inter mode (figure 5, numeral 23D and detailed in figure 12).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify the VLC encoder of Kato at figure 17, numeral 704, to include different intra and inter mode tables as taught by Okazaki, in order to “improve the coding efficiency ... depending upon generation frequency” (Okazaki, column 8, lines 1-5) because “intra frame coded quantized data and inter frame coded quantized data are different from each other in the frequency distributions of run lengths and data levels” (Okazaki, column 8, lines 8-10), which “makes it possible to further decrease the bit length of transformed and thereafter outputted picture data even though it is the quantized data coded by any coding system, compared with the existing case in which variable length coding is performed by using a VLC table for inter frame coding” (Okazaki, column 10, lines 58-65).

Stated another way, “it is possible to further improve the variable length coding efficiency by variable length coding input data with a variable length coding table selected in accordance with the coding efficiency among a plurality of variable length coding tables prepared compared with the case for performing variable length coding with only one variable length coding table” (Okazaki, column 4, lines 8-14). Thus, given that Kato’s VLC at figure 17, block 704 must encode both inter and intra mode information, by providing Kato with a plurality

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of variable length coding tables at block 704 for both intra and inter mode information as taught by Okazaki, efficiency can be improved.

Regarding claim 24, Okazaki's inter mode table (i.e., figure 5, numeral 23D and detailed in figure 12) is used for both AC and DC inter mode components, thus meeting the claimed limitation. Note: The claim does NOT explicitly require that the "AC component" and "DC component" inter mode tables be "different" (i.e., in a manner similar to line 9 of claim 23, which actually uses the word "different". In fact, according to the applicant's own disclosure, the "AC component" and "DC component" inter mode table may be the SAME table. For example, looking at applicant's figure 6B, if the quantization is low and the scanning position is low, then the same table "T1" is used for both AC and DC components. Therefore, in the absence of any limitation in claim 24 explicitly requiring "different" tables, the examiner contend that the different entries of the same table (i.e., figure 12 of Okazaki) meets the claimed requirements.

10. Response to the November 17, 2004 Submission:

Summary of Applicant's Remark: "Kato fails to disclose or suggest at least 'a table selectable for an AC component of an intra mode that is different from a table selectable for an inter mode,' as recited in claims 18, 19 and 23" (Remarks page 14, lines 1-3).

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Examiner's Response: Agreed. Kato's intra mode AC coefficients and Inter mode coefficients are encoded by the same encoder, at figure 17, numeral 704. Okazaki teaches this concept in the obviousness rejection above.

Summary of Applicant's Remark: "Okazaki appears to disclose a single table for an intra mode, that is, a table for both AC and DC components of the intra mode, and a single table selectable for an inter mode" (Remarks page 14, lines 13-14).

Examiner's Response: Agreed. Okazaki discloses a VLC encoder (figure 5, numeral 23A), and a plurality of VLC tables comprising a table selectable for all components (AC and DC) of an intra mode (figure 5, numeral 23C and detailed in figure 14) that is different from a table selectable for an inter mode (figure 5, numeral 23D and detailed in figure 12).

Summary of Applicant's Remark: "There is no teaching or suggestion that there should be a separate table for DC components" (Remarks page 14, lines 7-18).

Examiner's Response: Kato already teaches a separate table for DC components, e.g., at figure 17, numeral 705. Okazaki is not relied upon as teaching this feature. Rather, Okazaki is relied upon in the 103 combination above as teaching the concept of separate tables for inter and intra modes. Kato, who currently teaches use of the same table 704 for both inter mode encoding and intra mode AC encoding, is modified according to the teaching of Okazaki whereby separate tables for these two encoding operations are utilized. The modification does not effect Kato's existing disclosure with respect DC intra mode encoding. Claim 18 calls for "a table selectable for a direct-current (DC) component of said intra mode", and Kato, as modified according to the

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teaching of Okazaki, meets this limitation at figure 17, numeral 705. Again, the modification to Kato does not effect the DC intra mode processing already taught by Kato.

Summary of Applicant's Remark: "Even if combined, these references still do not disclose 'a table selectable for an alternating-current (AC) of an intra mode that is different from a table selectable for an inter mode, and a table selectable for a direct-current (DC) component of said intra mode'" (Response page 14, lines 19-21).

Examiner's Response: Disagreed. The combination of Kato and Okazaki properly teaches every element of the rejected claims, include these elements as follows:

Kato teaches:

"a table selectable for an alternating-current (AC) of an intra mode" at figure 17, line 704.

"a table selectable for an inter mode" at figure 17, numeral 704.

"a table selectable for a direct-current (DC) component of said intra mode" at figure 17, numeral 705.

Kato does NOT teach a "different" table for the "inter mode".

Okazaki teaches a VLC encoder (figure 5, numeral 23A) having a table selectable for an AC component of an intra mode (figure 5, numeral 23C and detailed in figure 14) that is different from a table selectable for an inter mode (figure 5, numeral 23D and detailed in figure 12).

Thus, the combination teaches all the elements.

Regarding the combination, the examiner stated in the previous Office Action and hereinabove that it would have been obvious to modify the VLC encoder of Kato at figure 17, numeral 704, to include different intra and inter mode tables as taught by Okazaki, in order to:

“improve the coding efficiency ... depending upon generation frequency” (Okazaki, column 8, lines 1-5), because

“intra frame coded quantized data and inter frame coded quantized data are different from each other in the frequency distributions of run lengths and data levels” (Okazaki, column 8, lines 8-10), which

“makes it possible to further decrease the bit length of transformed and thereafter outputted picture data even though it is the quantized data coded by any coding system, compared with the existing case in which variable length coding is performed by using a VLC table for inter frame coding” (Okazaki, column 10, lines 58-65).

The Kato and Okazaki combination teaches all of the elements of the claimed invention, and the combination is well founded with motivation quoted directly from the secondary teaching (Okazaki).

Summary of Applicant's Remark: The “examiner has not established how one reference should be modified through teaching of the other to arrive at Applicant's claimed invention” (Response page 15, lines 1-2).

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Examiner's Response: Disagreed – refer to the arguments directly above. In the previous Office Action, the examiner stated:

“It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify the VLC encoder of Kato at figure 17, numeral 704, to include different intra and inter mode tables as taught by Okazaki, in order to ... [motivation]”.

The modification is simple. That is, substitute two separate VLC tables, one for inter mode and one for intra mode as taught by Okazaki at figure 5, numerals 23C and 23D, for the single VLC table currently taught by Kato at figure 17, numeral 704. Thus, according to the Kato and Okazaki combination, different tables are used for intra and inter modes in all circumstances:

AC + DC Inter mode ---- Okazaki Table 23D

AC Intra mode ----- Okazaki Table 23C

DC Intra mode ----- Kato Table(s) 705

There is good reason why one would be motivated to utilize a “different” table for AC intra mode and AC/DC Inter mode. Okazaki states that “intra frame coded quantized data and inter frame coded quantized data are different from each other in the frequency distributions of run lengths and data levels” (Okazaki, column 8, lines 8-10), and providing separate tables serves to “improve the coding efficiency ... depending upon generation frequency” (Okazaki, column 8, lines 1-5), which “makes it possible to further decrease the bit length of transformed

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and thereafter outputted picture data even though it is the quantized data coded by any coding system, compared with the existing case in which variable length coding is performed by using a VLC table for inter frame coding" (Okazaki, column 10, lines 58-65).

Summary of Applicant's Remark: Lack of "motivation", no "reasonable expectation of success", and the reference "teach away from each other" (Remarks page 15, bottom paragraph).

Examiner's Response: The motivation for the combination has been discussed at length above. Regarding "success", there is no reason why such a combination would NOT be successful, particularly given the motivation recited from the Okazaki reference. Finally, Kato does not teach away such a modification. There is nothing in the Kato reference that suggests that a single VLC table is absolutely necessary for block 704. This is not the essence of the Kato invention by any means. The single VLC table of Kato (numeral 704) is simply what Kato has selected for his preferred embodiment. Kato is certainly open to "various changes and further modifications ... by one skilled in the art without departing from the scope or spirit of the invention" (Kato, column 29, line 67) and the Okazaki modification violates neither the spirit nor scope of the Kato invention.

Claims 9-11 and 20-22

11. Claims 9 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 10, 11, 21 and 22 would then be allowable as depending from an allowable claim.

12. The following is an examiner's statement of reasons for allowance: The prior art does not teach "variable-length coding tables ... having different patterns of a regular region and an escape region", as depicted by applicant's figures 7A-7C, and as argued by the applicant in the response received on November 17, 2004, at page 16 . The VLC tables disclosed by Kaneko at figure 10, each represent a single region within the coding block depicted in figure 12. Thus, each of the tables in figure 10 do not have distinct regular and escape regions as required by the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claims 18, 19, 23 and 24

13. Claim Rejections:

Claims 18, 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kato (US 5,559,557 A) and Okazaki et al. (US 5,982,437 A), and further in combination with Kim (US 5,402,244 A).

The details of the Kato and Okazaki combination as applied to claims 18, 19 and 23 above are incorporated herein by reference.

Even if Kato did not disclose the selection of one of said VLC tables based on “quantization step size” as argued by the applicant (i.e., In the May 24, 2004 response, at page 10), Kim teaches this technique.

Kim discloses a system for variable-length coding a video signal (figure 1), comprising setting a plurality of variable length coding tables (“4 variable length coding lookup tables” at column 4, line 34), and selecting one of the tables based on quantization step size (“and which can be selectively addressed by run-level code words” where “the selection of the variable length coding lookup tables in the VLC coding process is achieved by referencing the QP’s used in the DCT coefficient quantization process” at column 4, lines 37-40; the “QP’s” are the quantization parameters that control the quantization step size, for example, “Qp=2 to 3, Qp=4 to 7, Qp = 8-15 and Qp = 16 to 28” at column 5, line 1). Kim sets the plurality of VLC tables based on the “statistical distribution of amplitude levels” within the images at column 5, line 12 and elsewhere).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to provide, for each of the VLC tables disclosed by Kato, a plurality of VLC tables as taught by Kim and selectable based on quantization step size as taught by Kim, thereby achieving “a highly efficient bit rate reduction through the use of a number of lookup tables reflecting the statistical local variations caused by the use of different quantization parameters” (Kim, column 6, lines 10-14).

It is noted that Kato suggests that the “data in the tables ... does not have to be fixed” and instead, “it may be variables that result in an optimum post-encoding compression factor” where

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“the values of the variables are determined from statistical observation of the input picture signal” at column 28, lines 51-55, and Kim provides one method of fulfilling this suggestion.

Regarding claim 24, Okazaki's inter mode table (i.e., figure 5, numeral 23D and detailed in figure 12) is used for both AC and DC inter mode components, thus meeting the claimed limitation. Note: The claim does NOT explicitly require that the “AC component” and “DC component” inter mode tables be “different” (i.e., in a manner similar to line 9 of claim 23, which actually uses the word “different”. In fact, according to the applicant's own disclosure, the “AC component” and “DC component” inter mode table may be the SAME table. For example, looking at applicant's figure 6B, if the quantization is low and the scanning position is low, then the same table “T1” is used for both AC and DC components. Therefore, in the absence of any limitation in claim 24 explicitly requiring “different” tables, the examiner contend that the different entries of the same table (i.e., figure 12 of Okazaki) meets the claimed requirements.

14. Response to the November 17, 2004 Submission:

Summary of Applicant's Remark: Applicant relies on the same arguments previously advanced with respect to the Kato and Okazaki combination as applied to claims 18, 19 and 23 (Remarks pages 17-18).

Examiner's Response: Examiner's response is the same.

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Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Brian Werner
Primary Examiner
Art Unit 2621
November 14, 2005

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke extending to the right.

**BRIAN WERNER
PRIMARY EXAMINER**